

D1 24. (Twice Amended) An isolated polynucleotide consisting of a nucleotide sequence that is at least 95% identical to that of SEQ ID NO:1 encoding a protein with an amino acid sequence of SEQ ID NO:2 and wherein said protein has phosphofructokinase enzymatic activity.

D2 27. (Amended) A vector comprising the polynucleotide of any one of claims 20 or 22-26.

II. REMARKS

Preliminary Remarks

Attached is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned "Version with markings to show changes made".

The applicants have noted the comments (in Sections 3 and 4 of the official action) with respect to the information disclosures statements. The applicants are confused by the examiner's comments. Specifically, WO 01/00805 was filed with the information disclosure statement filed October 2001 (the applicants are in possession of a receipt stamped by the OIPE). If view of the size of the document (well over 900 pages), the applicants wonder whether the Patent Office has mislaid the document.

As to the examiner's comments with respect to the information disclosure statement filed March 2002, the applicants are equally confused. Specifically, no marked-up version was returned by the Patent Office.

In a voicemail message left for the examiner today, the undersigned asked for clarification on these matters and indicated that such matters will be attended to after the applicants have received such clarification. In a conversation with the undersigned following the prior voicemail, the examiner indicated that he will determine the issues with information disclosure statements and come back to the applicants as needed.

Patentability Remarks

The examiner again rejected claims 21-24 and 27-30 under 35 U.S.C. § 112, first paragraph, as allegedly being broader than the enabling disclosure. Specifically, the examiner asserted that the specification does not reasonably provide enablement for any isolated

polynucleotide encoding a protein with an amino acid sequence that is at least 70%, 80%, 90%, or 95% identical to that of SEQ ID NO:2 wherein said protein has acyl carrier protein activity. The applicants respectfully traverse.

Again the applicants assert that the examiner's argument appears to be that it would take undue experimentation for one of skill in the art to make and use all of the polynucleotides encompassed by the present claims. However, this is an improper standard for judging enablement. The relevant question is not whether one of skill in the art can make *all* of the embodiments but rather whether such an individual can make and use *each* embodiment without undue experimentation.

As stated previously, the synthesis of polynucleotides is routine in the art and there is no reason to think that the making of any of the polynucleotides encompassed by the applicants' claims would be unusually difficult. Similarly, recombinant DNA techniques for introducing genes into cells and the use of such cells for the making of amino acids are well known techniques and should not require undue experimentation. In the present case, this is should be all that is required of enablement.

Further, the applicants respectfully point out to the examiner that in order to expedite prosecution, they have amended the claims to be directed a more defined number of polynucleotides.

In view of the foregoing, the applicants submit that as amended herein the claims are fully enabled by the specification and thus request that this rejection be withdrawn.

III. CONCLUSION

In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any point remains in issue that the examiner feels may be best resolved through a personal or telephone interview, the examiner is **strongly urged** to contact the undersigned at the number indicated below.

Respectfully submitted,

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Enclosure: Appendix

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 22-24 and 27 were amended as follows.

22. (Twice Amended) An isolated polynucleotide [encoding a protein with an amino acid] consisting of a nucleotide sequence that is at least 80% identical to that of SEQ ID NO:1 encoding a protein with an amino acid sequence of SEQ ID NO:2 and wherein said protein has phosphofructokinase enzymatic activity.

23. (Twice Amended) An isolated polynucleotide [encoding a protein with an amino acid] consisting of a nucleotide sequence that is at least 90% identical to that of SEQ ID NO:1 encoding a protein with an amino acid sequence of SEQ ID NO:2 and wherein said protein has phosphofructokinase enzymatic activity.

24. (Twice Amended) An isolated polynucleotide [encoding a protein with an amino acid] consisting of a nucleotide sequence that is at least 95% identical to that of SEQ ID NO:1 encoding a protein with an amino acid sequence of SEQ ID NO:2 and wherein said protein has phosphofructokinase enzymatic activity.

27. (Amended) A vector comprising the polynucleotide of any one of claims [20-26] 20 or 22-26.

End of Appendix